

ABSTRACT

Grooves 18 formed to face plates 11 and 12 of a hollow shape member 10 at an abutted region with hollow shape member 20 receive projections 28 formed to face plates 21 and 22 of member 20. A connecting plate 14 orthogonal to the face plates 11 and 12 is provided to the hollow shape member 10. There is no connecting plate orthogonal to face plates 21 and 22 disposed on the end of the hollow shape member 20. Friction stir welding heat causes the face plate 21 (22) to move toward the thickness direction of hollow shape members 10 and 20, but such movement is suppressed by the groove 18 and projection 28. Thereby, the abutted region is welded flatly.

Version With Markings to Show Changes Made

ABSTRACT

Face plates 11 and 12 of a hollow shape member 10 are abutted against face plates 21 and 22 of a hollow shape member 20. Grooves 18 formed to ~~[[said]]~~ face plates 11 and 12 of a hollow shape member 10 at ~~[[the]]~~ an abutted region with hollow shape member 20 receive projections 28 formed to said face plates 21 and 22 of member 20. A connecting plate 14 orthogonal to ~~[[said]]~~ the face plates 11 and 12 is provided to the hollow shape member 10. There is no connecting plate orthogonal to face plates 21 and 22 disposed on the end of the hollow shape member 20. Friction stir welding heat causes the face plate 21 (22) to move toward the thickness direction of hollow shape members 10 and 20, but such movement is suppressed by the groove 18 and projection 28. Thereby, the abutted region is welded flatly. ~~Since the hollow shape member 20 requires no connecting plate corresponding to plate 14,~~ the welded members are light in weight.